DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: The existing tank on the "new" side of town is in disrepair and in need of replacement. Furthermore, the tank is undersized and the water treatment plant operator works 7 days per week to keep up with the demand in the community. A new water tank is needed to build the water system's capacity, provide increased chlorine contact time for the water distribution system, and improve the overall quality of the water.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: New 150,000 gallon water storage tank, repaired water storage tank foundation (pad), and yard piping to the water distribution system.

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER DISTRIBUTION - Water storage tank, no foundation, water distribution	IHS Regular	150000	Gal.	C
Water, Other - Foundation - conventional, local gravel, water other	IHS Regular	15000	Sf.	C

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $675,000.00

DISCLAIMER: Data displayed below is for informational purposes only.
DRAFT

EXISTING DEFICIENCIES:

Water: 11 non-native homes and 3 non-residential buildings are not connected to the piped water supply and must self haul water or get water delivered from the city.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Provide water services connecting residences to a newly installed water main along Louden Loop (to be completed fall 2011).

Sewer: None

Solid Waste: None

O & M: None

CIP Details:

Related Projects: This project will install water services in residences along Champion Highway. A road project (funded at $1,525,000) will repair and replace the same sections of Champion Highway that the services will be installed in.

Ongoing Funding: A project to install the water main along Louden Loop will be completed in the fall of 2011. This requested service line project (GALENA - Louden Loop Water Service - AK18606-3001) will install water services from the newly installed water main to the existing residences. It is a small, urgently needed project to provide first-time water service to individual non-native homes that have no other avenue to get funding.

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER DISTRIBUTION - In-house plumbing, water distribution	IHS Regular	14	Ea.	C
WATER DISTRIBUTION - Service lines, direct bury, water distribution	IHS Regular	1540	Ft.	C

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $660,800.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: The community of Galena operates two separate water systems - New town water treatment plant and an old Air Force Base water treatment plant. The Old Town system has difficulties delivering a suitable amount of water with the current water system and was damaged during the recent 2013 flood. The System was brought back on-line however there is still a concern about the long term viability of this source.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Construct an insulated 6 inch HDPE water main between New Town WTP and the ex-Air Force Base WTP to provide a more reliable source. Provide needed upgrades to the WTP to accommodate the proposed water main. This includes the construction of a small building to house the heating equipment.

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER TREATMENT - Treatment plant, rehabilitation, water treatment	Other	1	Ea.	D
WATER DISTRIBUTION - Mains, above ground, water distribution	Other	14000	Ft.	D
WATER DISTRIBUTION - Mains, direct bury, water distribution	IHS Regular	14000	Ft.	D
WATER TREATMENT - Treatment plant, rehabilitation, water treatment	IHS Regular	1	Ea.	D
WATER TREATMENT - Treatment plant, new, no foundation, water treatment	IHS Regular	320	Sf.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $3,428,800.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: The cost of operating two water treatment plant facilities within the community has become a great financial burden on the community.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Provide design and construction activities to incorporate a water transmission main connecting the two water treatment plants so that they may operate together and more efficiently. The proposed line will bypass the city water treatment plant and all treatment will occur at the second WTP.

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER DISTRIBUTION - Mains, direct bury, water distribution	IHS Regular	10000	Ft.	D
Water, Other - Professional Services (engineering)	IHS Regular	1	Ls.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $2,700,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: A total of twelve (16) homes lack piped water service along Northern Antoski Avenue.

Sewer: A total of four (16) homes along Northern Antoski Avenue lack sewer service.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Extend piped water distribution system and water services to the homes.

Sewer: Install pre-engineered sewer treatment plants and associated in-home plumbing in the homes that lack it.

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER DISTRIBUTION - Mains, direct bury, water distribution	IHS Regular	2800	Ft.	C
WATER DISTRIBUTION - Service lines, direct bury, water distribution	IHS Regular	1800	Ft.	C

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $1,380,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: A total of eight (8) homes lack piped water service along Northern Antoski Avenue. One (1) of the native owned homes also lack indoor plumbing.

Sewer: One (1) native owned home lacks sewer sewer service and associated indoor plumbing.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Extend piped water distribution system to serve the homes. Install in-home plumbing in the one home that lacks it.

Sewer: Install a sewer treatment plant, ADEC approved holding tank, or septic tank and drainfield and associated in-home plumbing in the one home that lacks it.

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER DISTRIBUTION - Mains, direct bury, water distribution	IHS Regular	2000	Ft.	A
SEWER COLLECTION - In-house plumbing, gravity, sewer collection	IHS Regular	1	Ea.	A
WATER DISTRIBUTION - In-house plumbing, water distribution	IHS Regular	1	Ea.	A
WATER DISTRIBUTION - Service lines, direct bury, water distribution	IHS Regular	660	Ft.	A

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $448,800.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: None

Sewer: None

Solid Waste: Existing Class III municipal solid waste landfill lacks compaction/compactor equipment. Galena has inadequate collection/transfer system.

O & M: None

PROPOSED FACILITIES:

Water: None

Sewer: None

Solid Waste: Provide transfer station with compaction equipment, paper incinerator, waste oil incinerator and recycle aluminum can collection crusher. Provide solid waste landfill with a compactor.

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
Solid Waste C (Development) - General estimate, solid waste	Other	1	Ls.	D
Solid Waste A (Plan) - Management Plan, Solid Waste	IHS Regular	1	Ls.	D
Solid Waste C (Development) - Incinerator, solid waste	IHS Regular	1	Ea.	D
Solid Waste C (Development) - Equipment, solid waste	IHS Regular	1	Ls.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $338,400.00

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Updates Completed By Engineer

EXISTING DEFICIENCIES:

Water: Pumps, boilers, and controls have exceeded their useful life and need to be replaced. Many valves are inoperable. Pumps and boilers are obsolete. The fuel tank system is in poor condition and needs to be replaced. Fuel from the existing bulk tanks currently flows through a 1,000 gallon +/- intermediate tank and then to the existing simplex-style interior day tank. The exterior intermediate tank is in very poor condition, is non-code compliant and in danger of failing.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Upgrade water plant, replacing copper piping to meet lead and copper rule. Upgrades will replace pumps, piping, and controls.

Sewer: None

Solid Waste: None

O & M: None

CIP Details:

Related Projects: The city has a wind to heat project to provide an electric dumpload boiler in the water plant for tank heat. It would be a perfect time to upgrade the rest of the equipment in the waterplant, and this would be excellent coordination.

Ongoing Funding: The community has completed a water treatment project funding by IHS. It would be an excellent time to upgrade the rest of the equipment in the water plant building, as the recent project dealt with filtration and treatment, and did not upgrade boiler, distribution pumps, fuel systems, etc.

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER TREATMENT - Treatment plant, rehabilitation, water treatment	IHS Regular	1	Ea.	B

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $2,000,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: The 1.3 million gallon water tank insulation package has failed twice since the tank was placed online in 2009. The insulation is likely to fail again within 1 to 4 years.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Reinsulate the tank with an insulation system suitable for the arctic.

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER DISTRIBUTION - Water storage tank, no foundation, water distribution	IHS Regular	1300000	Gal.	C

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $520,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: The existing water source does not provide enough water during the late winter months when precipitation is below normal levels for the previous year.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Construct a 2.2 million gallon water storage tank adjacent to the existing water treatment plant.

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER DISTRIBUTION - Water storage tank, no foundation, water distribution	IHS Regular	2200000	Gal.	E
WATER DISTRIBUTION - Foundation - conventional, local gravel, water distribution	IHS Regular	10000	Sf.	E

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $5,090,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: Gambell currently has only 1 well in a shallow aquifer with limited recharge. Ground water studies recommended that the well be restricted to 14 to 16 gpm (20,000 to 23,000 gallon per day) to avoid overpumping the aquifer and drawings salt water from below the fresh water aquifer. The population is currently 681 people. The system cannot safely produce 35 gallons per capita per day from November through May and protect the aquifer from salt water instrustion.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Provide horizontal well and 800 foot transmission line to provide adequate fresh water supply for 681 people. NOTE: HITS not complete -15 pts assigned.

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER DISTRIBUTION - Mains, direct bury, water distribution	IHS Regular	800	Ft.	C
WATER SOURCE - Surface water gallery, water source	IHS Regular	1	Ea.	C

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $620,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: None

Sewer: Sewer main "M" backs up many times per year and is known to have reverse grade. If it is not replaced, it will fail completely in 4 years. This impacts the clinic, headstart, post office, and one home. This has caused the clinic and Headstart to close for short times. Headstart moved out of their building in 2014 temporarily due to failed sewer. Overflowing manholes are a health hazard to everyone.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: None

Sewer: Sewer main "M" would provide reliable service to the Headstart, Clinic, Post Office, and one home, if the line is regraded and repaired.

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
SEWER COLLECTION - Mains, direct bury, sewer collection	IHS Regular	575	Ft.	A

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $115,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: 43 homes in the Old Village have no running water and have honeybuckets.

Sewer: 43 homes in the Old Village have no running water and have honeybuckets.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: This project would servce the Old Village with running water and gravity sewer.

Sewer: This project would servce the Old Village. Lift station, sewer main, in-house plambing

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER DISTRIBUTION - Mains, direct bury, water distribution	IHS Regular	3840	Ft.	A
WATER DISTRIBUTION - Service lines, direct bury, water distribution	IHS Regular	4000	Ft.	A
SEWER COLLECTION - Mains, direct bury, sewer collection	IHS Regular	3850	Ft.	A
SEWER COLLECTION - Service lines, direct bury, sewer collection	IHS Regular	4000	Ft.	A
SEWER COLLECTION - Lift station, sewer collection	IHS Regular	1	Ea.	A
WATER DISTRIBUTION - In-house plumbing, water distribution	IHS Regular	43	Ea.	A
Water, Other - Professional Services (engineering)	IHS Regular	1	Ls.	A
Sewer, Other - Professional Services (engineering)	IHS Regular	1	Ls.	A

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $9,034,500.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: Water supply is limited and less than 40 gallons per person per day.

Sewer: Existing toilets are causing increased demand on a limited water supply.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Replace existing toilets with low water use toilets will reduces water usage. Low flow shower heads and wate meters will also be installed.

Sewer: Lower sewer operating cost due to lower water usage.

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
Water, Other - Other water	IHS Regular	1	Ls.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $280,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: None

Sewer: None

Solid Waste: The community needs a new solid waste site.

O & M: None

PROPOSED FACILITIES:

Water: None

Sewer: None

Solid Waste: New solid waste site near the end of Troutman Lake.

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
Solid Waste A (Plan) - Management Plan, Solid Waste	IHS Regular	1	Ls.	D
Solid Waste B (Closure) - Closure, solid waste site	IHS Regular	1	Ac.	D
Solid Waste C (Development) - Development, solid waste site	IHS Regular	1	Ac.	D
Solid Waste C (Development) - Road, solid waste	IHS Regular	3000	Ft.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $1,144,870.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: None

Sewer: None

Solid Waste: Solid Waste Site is improperly fenced allowing access for bear and other pests.

O & M: None

PROPOSED FACILITIES:

Water: None

Sewer: None

Solid Waste: Complete fencing of solid waste site.

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
Solid Waste C (Development) - Other solid waste	IHS Regular	1	Ls.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $300,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: The Native Village of Goodnews Bay, under joint management by the Alaska Rural Utility Collaborative, is managing the water and sewer system in Goodnews Bay. Most residential and commercial customers are connected to the new surface water sanitation infrastructure. Most residential structures are now plumbed. A piped water and gravity sewer system with plumbing for 70 + homes is completed.

Sewer: The existing lagoon was constructed in 2010 and is currently operational receiving wastewater flows from residential and commerical developments. The lagoon's existing containment berms were constructed as compacted clay liners with compaction of 97% or higher standard proctor density. The composition of the berm core is fairly uniform comprised of medium to high plasticity clays. Since the lagoon construction completion, the compacted clay liner banks have been eroding and sloughing resulting in vertical faces of up to 1.5m in the most severe locations. The majority of the lagoon banks exhibit vertical faces in the range of approximately 0.5m to 0.75m. When the ocean rises on flood tides, during storm conditions, wave actions are eroding away the ocean side lagoon berms.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: None

Sewer: A geotechnical investigation was completed for this lagoon. The sloughing affecting the interior side slopes of the storage cell and facultative cell containment berms is believed to be a result of surficial erosion, in part, by wave action. The exposed faces of the berms in un-armored sideslope areas are comprised of silty clay and clay soils with a fair to poor resistance to erosion. The erosion is exacerbated by periodic/annual drawdown and/or emptying of the cells which: a) eliminates a hydraulic pressure acting as a toe load supporting the side slopes, b) leaves the exposed slopes saturated, heavy and weak, and c) leaves a relatively high residual pore pressure within the clay which is slow to dissipate. The combined effects are resulting in the slumping of the interior slopes. The slumping is resulting in the formation of near vertical faces. This in-turn is developing further instability of the interior sideslopes (in unarmored areas) in the form of tension cracking which, eventually, will lead to further slumping. The slump debris will tend to be washed away by wave action as the cells are once again refilled. The project requires rehabilitating the clay lined banks. The first step proposed is to bench 1.4m steps into the existing clay lined berm and rebuild it using clay and re-compacting at 150mm lifts to a 3.5:1 sideslope, as well as adding heavy rock armament to withstand exterior erosion of the berms during storm flood events.

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
Sewer, Other - Other sewer	IHS Regular	1	Ls.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $1,450,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: None

Sewer: None

Solid Waste: The existing site is un-permitted, not fenced and is located within and 1/8 of a mile from the school. Without fencing, access to the site by children and animals cannot be controlled. Waste is burned in a trench and dumping is self-haul and not controlled. Minimal cover, if any is provided for waste disposal.

O & M: None

PROPOSED FACILITIES:

Water: None

Sewer: None

Solid Waste: A new larger fenced, permitted solid waste landfill is proposed.

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
Solid Waste A (Plan) - Management Plan, Solid Waste	EPA	1	Ls.	D
Solid Waste C (Development) - Development, solid waste site	IHS Regular	1	Ac.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $1,475,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: The water distribution system in the community of Grayling is over 30 years old, constructed of arctic PVC pipe with copper services. The system is failing in many areas and results in massive system water loss and multiple freeze ups throughout the winter months each year. According to multiple RMW trip reports, the ARUC manager who previously operated the system, and the attached Status Component Inspection Report, leaks in the system drain the water storage tank and deprive the entire town of water. See attached documentation. This is especially exacerbated in the winter when the infiltration gallery has limited water due to a frozen water source.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: This project will replace the oldest and most unreliable loop in the community of Grayling. This project will replace the arctic PVC mains and copper service lines with arctic HDPE mains and services and provide new arctic boxes where required.

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER DISTRIBUTION - Mains, direct bury, water distribution	IHS Regular	4520	Ft.	C
WATER DISTRIBUTION - Service lines, direct bury, water distribution	IHS Regular	2000	Ft.	C
Water, Other - Professional Services (engineering)	VSW/EPA	1	Ls.	C

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $1,275,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: The water distribution system in the community of Grayling is over 30 years old, constructed of arctic PVC pipe with copper services. The system is failing in many areas and results in massive system water loss and multiple freeze ups throughout the winter months each year. According to multiple RMW trip reports, the ARUC manager who previously operated the system, and the attached Status Component Inspection Report, leaks in the system drain the water storage tank and deprive the entire town of water. See attached documentation. This is especially exacerbated in the winter when the infiltration gallery has limited water due to a frozen water source. Phase 1 should be completed prior to phase 2.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: This project will replace loops 1 and 3 (Phase II) in the community of Grayling. This project will replace the arctic PVC mains and copper service lines with arctic HDPE mains and services and provide new arctic boxes where required.

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER DISTRIBUTION - Mains, direct bury, water distribution	IHS Regular	1500	Ft.	D
WATER DISTRIBUTION - Service lines, direct bury, water distribution	IHS Regular	500	Ft.	D
Water, Other - Professional Services (engineering)	IHS Regular	1	Ls.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $446,500.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: The community lacks a washeteria.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Construct a washeteria

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
Water, Other - Washeteria, water portion, no foundation, water other	IHS Regular	1440	Sf.	D
Water, Other - Foundation - concrete foundation	IHS Regular	1440	Sf.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $1,516,392.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: None

Sewer: 3,000 linear feet of sewer mains are sagging which leads to freeze up in the winter and need to be replaced. The freeze ups result in the discharge of raw sewage to the ground.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: None

Sewer: Replace 3,000 linear feet of sewer main with 6-inch HDPE arctic pipe including manholes, cleanouts and unserviceable service lines.

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
SEWER COLLECTION - Mains, direct bury, sewer collection	IHS Regular	3000	Ft.	C

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $1,140,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: The water storage tank is leaning and is structurally out of limits for the maximum plane deflection of the tank. The maximum allowable out-of-plane deflection for the tank is 0.216 inches, and some points on the tank are as much as 0.505 inches (over twice the allowable limit) out of plane. The tank is structurally at risk, and cannot fully drain due to the angle of settlement.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Re-construct and level the water storage tank foundation to achieve a level tank that is withing structural loading limits and can completely drain.

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
Water, Other - Foundation - conventional, local gravel, water other	IHS Regular	3500	Sf.	C

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $588,665.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: Gulkana has a new water treatment plant and shallow bury river intake structure commissioned in October 2013. It has become apparent that the intake structure is blocked by sediment during spring runoff and it is necessary to back wash the infiltration system to maintain an acceptable flow rate to the treatment plant

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: It will be necessary to design and construct an air scour system to maintain the water source.

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER SOURCE - Surface water gallery, water source	IHS Regular	1	Ea.	C

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $0.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: None

Sewer: None

Solid Waste: There are many old dumpsites of various sizes located in or around the Village area, remnants from the years when there were not adequate infrastructure for proper, actively managed solid waste disposal. All of these have potential to impact the health and safety of Village residents, primarily by contaminating the Village water supply, and secondarily from dust and other airborne particulates, and other forms of direct and indirect contact (i.e. kids playing in and around old dumps and playing with waste items, encountering old dump materials during construction or other excavation activities, etc.). Gulkana Village Council staff, assisted by a number of studies by ASCG Incorporated and the Alaska Native Tribal Health Consortium, have located a number of these old dumps. A couple of them have had some reclamation activities, but most are open surface dumps reclaimed only by years of weathering and exposure leading to deterioration of dump contents.

O & M: None

PROPOSED FACILITIES:

Water: None

Sewer: None

Solid Waste: The principal objectives of the overall project are: (1) Train all staff involved with the project in solid waste issues and skills. (2) In accordance with the Quality Assurance Project Plan (EPA Approved), conduct field studies on the open dumps and surrounding areas that may be contaminated by leachate. (3) Develop maps identifying problem areas. (4) Identify usage, both historical and current, and subsequent changes to the open dumps. (5) Develop report.

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
Solid Waste A (Plan) - Management Plan, Solid Waste	IHS Regular	1	Ls.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $94,784.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: The WTP requires refurbishing to allow continued long-term use of the facility.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Provide rehabilitation work to the water treatment plant.

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER TREATMENT - Treatment plant, rehabilitation, water treatment	IHS Regular	1	Ea.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $850,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: Current well does not meet separation distance from main sewer lines and lacks standard well head protection. Community lacks secondary well and well connection to the system.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Determine location for and drill a new community well. New well will become the primary well and the existing will be converted to a backup well.

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER SOURCE - Ground water well, water source	IHS Regular	1	Ea.	C
Water, Other - Other water	IHS Regular	1	Ls.	C

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $520,500.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: The water distribution system requires upgrades to ensure long-term functionality.

Sewer: The sewer distribution system requires upgrades to ensure long-term functionality. Several community manholes need to be repaired or replaced. The sewer lift station requires thermal upgrades to decrease O&M costs. Groundwater quality monitoring required to assess the impact of the lagoon on water quality.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Construct a new primary well. Refurbish water treatment plant building. Protect existing well and make it a backup water source. Upgrade water distribution system.

Sewer: Manhole upgrades, lift station upgrades, and groundwater monitoring study to be provided.

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
Water, Other - Other water	IHS Regular	1	Ls.	D
WATER DISTRIBUTION - Service lines, direct bury, water distribution	IHS Regular	480	Ft.	D
Sewer, Other - Other sewer	IHS Regular	1	Ls.	C
SEWER COLLECTION - Lift station, sewer collection	IHS Regular	1	Ea.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $811,100.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: None

Sewer: None

Solid Waste: Existing open dump requires clean-up, fence, and permitting.

O & M: None

PROPOSED FACILITIES:

Water: None

Sewer: None

Solid Waste: Clean-up existing solid waste site and develop a new permitted sold waste facility.

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
Solid Waste B (Closure) - Closure, solid waste site	IHS Regular	5	Ac.	D
Solid Waste C (Development) - Development, solid waste site	IHS Regular	4	Ac.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $932,286.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: None

Sewer: The existing secondary treatment plant was constructed in 1972 and rated for a maximum design flow of 175,000 gpd. Sewage flows periodically exceed 175,000 gpd during heavy rainfall events. The existing WWTP has been renovated at least twice and is scheduled for additional repair work. The sewage collection system had recent I&I repair work. While manhole repair has been sucessful, the collection piping system continues the leak excessively. Because of the overall age and condition of the facility and the periodic flow violations, the plant should be replaced.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: None

Sewer: ADEC does not want to consider a secondary treatment waiver. A sewage lagoon could be located near the sanitary landfill but would entail an extensive force main along with a return line back to the existing ocean outfall. However, a facultative lagoon system seems to be a poor choice. The logical choice is reconstructing a secondary waste water treatment plant close to the existing outfall.

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
SEWER TREATMENT - Treatment plant, sewer treatment	IHS Regular	1	Ea.	C

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $5,000,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: The water main on the north end of Raven Drive was turned off years ago because of corroded ductile iron water main. The City has repaired several leaks since then on the remaining line to the cul-de-sac on Raven Drive (south feed). The line was again shut off during the week of June 1, 2009 to fix a major leak on the line. A 2" corroded hole in the pipe was encountered. Other leaks are suspected. Where corrosion is occuring, the pipe walls keep getting thinner until the inner cement liner bursts and a leak develops. The Hoonah Public Work guys report that they are "chasing their tails" trying to keep this section of pipe in operation. A cross connection occurs with each leak.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: The corroded 6" ductile iron water main should be replaced with new 8" HDPE water main. An estimated 640' of water main is needed (see attached maps). All homes should be connected to the new line. Since the existing line is buried approximately 7' deep, the new line can be installed above the old line in the same location. The City would be responsible for all road repairs (in-kind contribution of $50,000 value).

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER DISTRIBUTION - Mains, direct bury, water distribution	IHS Regular	640	Ft.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $132,480.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: No services have residential water meters. This results in excessive wasting of water. The City desires to install meters on all the services.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Install meters on all the Native owned residential services.

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
Water, Other - Other water	IHS Regular	1	Ls.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $95,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: Four homes are located in Eagle Subdivision that are without water service.

Sewer: Four homes located in Eagle Subdivision are without sewage service.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Install water main and water service lines per the attached plans. -15 pts since HITS is not complete for this project.

Sewer: Install sewage collection mains and service lines per the attached plans.

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER DISTRIBUTION - Mains, direct bury, water distribution	BIA	1400	Ft.	A
SEWER COLLECTION - Mains, direct bury, sewer collection	IHS Regular	1283	Ft.	A
Water, Other - Road, water other	BIA	1400	Ft.	A
SEWER COLLECTION - Service lines, direct bury, sewer collection	BIA	400	Ft.	A
WATER DISTRIBUTION - Service lines, direct bury, water distribution	BIA	400	Ft.	A

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $629,430.00

DISCLAIMER: Data displayed below is for informational purposes only.
DRAFT

EXISTING DEFICIENCIES:

Water:

Sewer: The lagoon in Hooper Bay only can treat a limited amount of waste; there needs to be an expansion to the lagoon within the next 3 years so it can accomodate the entire village once water & sewer services are brought to this village.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: None

Sewer: Incorporate a primary treatment cell along with a tertiary treatment cell with the existing lagoon. The expansion could carry the lagoon until the year 2040. NOTE: -15 pts due to exceeding the SDS limit of 4 million.

Solid Waste: None

O & M: None

CIP Details:

Related Projects: Lagoon will serve all homes previously served.

Ongoing Funding: on-going house plumbing, services, and utilidor for Tomoganak and Blueberry Subdivisions.

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
SEWER TREATMENT - Lagoon, borrow local material, sewer treatment	IHS Regular	15	Ac.	A

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $7,500,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: The existing shallow water supply well does not meet ADEC source protection requirements (See attached ADEC regulatory letter). Furthermore, the well log shows that the water supply is not properly grouted or protected from flooding. The well log also indicates the well is screed from 30' to 35' below ground surface making it classified as under the influence of surface water. As a result the water treatment plant is in need of modifications to protect public health, meet the "Long Term 2 Enhanced Surface Water Treatment Rule", meet regulations for water under the influence of surface water, and modifications that result in the water treatment plant complying with the "Stage 2 Disinfection Byproducts Rule". The water storage tank portion off this scope of work was partially funded under project AN 11-NS6. Funded activities will be constructed during the 2014 construction season. Activities include construction of the water storage tank foundation, erecting the tank, and removing the old tank from the water treatment plant.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: This project will fund the following water treatment plant modifications to meet regulatory requirements. This project will modify the existing water treatment plant equipment to process groundwater under the influence of surface water in order to protect the public health and meet regulatory compliance. These improvements will bring the system into compliance with long-term enhanced surface water treatment rule regulations and the State disinfection byproduct rule. Items include: Replace the existing backwash pump Install an air scour system Install an online turbidimeter Install a raw water flow meter Install a 500 gallon surge basin Install treatment chemical pumps Install green sand filters Construct a small chemical room within the existing water treatment plant. All activities were designed as part of the Hughes Phase III Water Storage Tank and Water Treatment Plant design.

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER TREATMENT - Treatment plant, rehabilitation, water treatment	IHS Regular	1	Ea.	B

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $750,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: None

Sewer: The existing community drain field was only partially completed under the Hughes Sanitation facilities Phase 1 project. The drainfield was designed to consist of two small drainfields and use would alternate between them. The community has since grown in size and has plans for adding new homes to the sewer system. The existing drain field does not have capacity to accept additional sludge without the second drainfield.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: None

Sewer: Construct a second drain field adjacent to the existing drainfield per the Hughes Sanitation Facilities Phase 1 project design.

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
SEWER TREATMENT - Drainfield, community, sewer treatment	IHS Regular	2500	Sf.	C

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $375,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: None

Sewer: None

Solid Waste: A new solid waste facility was completed in the last year and is now open. The old dumpsite needs to be closed.

O & M: None

PROPOSED FACILITIES:

Water: None

Sewer: None

Solid Waste: Close the old village dump site.

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
Solid Waste B (Closure) - Closure, solid waste site	IHS Regular	1	Ac.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $150,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: The Huslia Water Treatment Plant foundation is showing movement resulting in cracks throughout the building.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Contract a structural engineer to inspect and provide recomendations for repairing the foundation. An engineering report would be developed as part of this project.

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
O & M, Other - Professional Services (engineering)	IHS Regular	1	Ls.	C

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $50,129.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: None
Sewer: None
Solid Waste: None
O & M: None

PROPOSED FACILITIES:

Water: None
Sewer: None
Solid Waste: None
O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $0.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: Existing impoundment and water intake need upgrades. Existing vertical turbine pumps need to be rebuilt or replaced because of recent mechanical unreliability.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Backfill gravel cribbing on dam where some has washed out. Install decking to prevent future wash-out. Repair the west wing wall. Replace broken lumber on the west wall. Reposition the trash boom logs in front of the intake structure and secure them in place with chains. Purchase new pumps or rebuild the existing ones.

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER SOURCE - Surface water impoundment, water source	IHS Regular	1	Ea.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $700,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: Existing dam is old and nearing end of useful service life. Water quality varies significantly at the existing dam due to changes in the river during storms. This causes water treatment challenges and occasional violations of the SWTR due to turbidity spikes. City received a letter from DEC in September 2003 stating that the City was a candidate for the SNC list due to treatment violations in 2002. These violations were likely caused by turbidity spikes.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Extend pipe approximately 15,000 LF to the North Branch of the Hydaburg River. Construct a new impoundment.

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER SOURCE - Surface water impoundment, water source	IHS Regular	1	Ea.	D
WATER DISTRIBUTION - Mains, direct bury, water distribution	IHS Regular	15000	Ft.	D
Water, Other - Road, water other	IHS Regular	15000	Ft.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $4,785,750.00

DISCLAIMER: Data displayed below is for informational purposes only.
DRAFT

EXISTING DEFICIENCIES:

Water: None

Sewer: The existing three sewage outfalls should be consolidated into a single ocean outfall discharge point for the community. One outfall is broken and discharging sewage near the beach. A companion project proposes to reroute sewage from the harbor outfall to the center outfall. This project phase would take rerouted flow from the float plane dock outfall to the center outfall, increase the size of the primary treatment tanks, and construct a properly sized ocean outfall.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: None

Sewer: This project proposes to construct an additional 30,000 gallons of primary septic tank and a 1,000' ocean outfall. This project would also include some minor sewer system repairs and abandonment of existing community septic tanks and ocean outfalls.

Solid Waste: None

O & M: None

CIP Details:

Related Projects:

Ongoing Funding: A companion project funded in 2012 proposes to construct a sewage lift station, force main, and gravity sewer main in Hydaburg. This work is being designed and has a total project cost estimate of $1,522,000

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
SEWER TREATMENT - Septic tank, community, sewer treatment	IHS Regular	1	Ea.	D
SEWER TREATMENT - Ocean outfall, sewer treatment	IHS Regular	1000	Ft.	D
Sewer, Other - Professional Services (engineering)	IHS Regular	1	Ls.	D
SEWER COLLECTION - Mains, direct bury, sewer collection	IHS Regular	200	Ft.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $1,850,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: The community does not have water service meters. This prevents the community from properly auditing water usage.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Install water meters at all service connections.

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
Water, Other - Other water	IHS Regular	1	Ls.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $113,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: Replace several portions of water main that are leaky and/or have reached the end of their useful service life.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Install 2000 lineal feet of water main.

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER DISTRIBUTION - Mains, direct bury, water distribution	IHS Regular	2000	Ft.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $233,780.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: None

Sewer: None

Solid Waste: Community has open dump site, unapproved, and non-managed.

O & M: Community needs O&M training, managment training, tools and equipment

PROPOSED FACILITIES:

Water: None

Sewer: None

Solid Waste: Build permitted solid waste site in Hydaburg as recommended in the Solid Waste Master Plan.

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
Solid Waste B (Closure) - Closure, solid waste site	IHS Regular	4	Ac.	D
Solid Waste C (Development) - Equipment, solid waste	IHS Regular	1	Ls.	D
Solid Waste C (Development) - Development, solid waste site	IHS Regular	10	Ac.	D
Solid Waste C (Development) - Other solid waste	IHS Regular	1	Ls.	D
Solid Waste C (Development) - Other solid waste	IHS Regular	1	Ls.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $1,550,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: None

Sewer: The sewer lagoon fencing is falling down. There is erosion of the berms around the perimeter of the lagoon. The concrete overflow structure has deteriorated. The concrete has crumbled and broken apart. There is ultraviolet light degradation of the liner.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: None

Sewer: Reinstall the chainlink fencing and fence posts. Patch degraded sections of the lagoon liner. Bring in fill to reform and reshape lagoon berms and establish erosion protection measures.

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
SEWER TREATMENT - Lagoon, borrow local material, sewer treatment	IHS Regular	1	Ac.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $165,600.00

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Updates Completed By Engineer

EXISTING DEFICIENCIES:

Water: There is no current phased plan for the community of Igiugig for water system improvements. The current sanitation facilities master plan for the community was completed over 10 years ago.

Sewer: There is no current phased plan for the community of Igiugig for sewer system improvements. The current sanitation facilities master plan for the community was completed over 10 years ago.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Under this project, a master plan will be prepared which outlines feasible water and sewer improvements for the City of Igiugig.

Sewer: Under this project, a master plan will be prepared which outlines feasible water and sewer improvements for the City of Igiugig.

Solid Waste: None

O & M: None

CIP Details:

Related Projects:

Ongoing Funding:

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
Water, Other - Study, water other	IHS Regular	1	Ls.	D
Sewer, Other - Study, sewer other	IHS Regular	1	Ls.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $124,200.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: Growing population of the community demands the expansion of the water utility.

Sewer: Growing population of the community demands the expansion of the wastewater utility.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Construct new water distribution and service lines to meet the growing demand in the community.

Sewer: Construct new wastewater collection and service lines, lift station, and force main line to meet the growing demand in the community.

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER DISTRIBUTION - Mains, direct bury, water distribution	IHS Regular	200	Ft.	A
WATER DISTRIBUTION - Service lines, direct bury, water distribution	IHS Regular	50	Ft.	A
SEWER COLLECTION - Service lines, direct bury, sewer collection	IHS Regular	50	Ft.	A
SEWER COLLECTION - Mains, direct bury, sewer collection	IHS Regular	200	Ft.	A
WATER DISTRIBUTION - Mains, direct bury, water distribution	IHS Regular	800	Ft.	C
WATER DISTRIBUTION - Service lines, direct bury, water distribution	IHS Regular	200	Ft.	C
SEWER COLLECTION - Mains, direct bury, sewer collection	IHS Regular	800	Ft.	C
SEWER COLLECTION - Force mains, direct bury, sewer collection	IHS Regular	500	Ft.	C
SEWER COLLECTION - Lift station, sewer collection	IHS Regular	1	Ea.	C

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $833,597.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: None

Sewer: The community does not have a proper location to dispose of sludge that is being pumped out of septic tanks. Septic tank waste is currently being disposed of at the landfill. DEC is prohibiting this practice. This project was started under AN-04-R83 and the design is complete and on the shelf. There are no construction funds available.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: None

Sewer: Build a new two celled sludge disposal site adjacent to the existing solid waste facility. Fencing is required around the perimeter of the facility.

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
SEWER TREATMENT - Lagoon, borrow local material, sewer treatment	IHS Regular	1	Ac.	D
Sewer, Other - Professional Services (engineering)	VSW/EPA	1	Ls.	D
Sewer, Other - Road, sewer other	IHS Regular	300	Ft.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $530,000.00